DOES THE CONSUMER'S VARIETY-SEEKING BEHAVIOR CONDITION THE WILLINGNESS TO TRAVEL FURTHER?*

Juan Luis Nicolau

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Correspondence to: Juan Luís Nicolau, Dpt. de Economía Financiera, Contabilidad y Marketing, Facultad de Económicas y Empresariales, Universidad of Alicante, Ap. Correos 99, E-03080 Alicante, Telf and Fax: +34 965.90.36.21, e-mail: JL.Nicolau@ua.es

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ABSTRACT

The objective of this study is to test the effect of the consumer's variety-seeking behaviour on the distance the tourist is prepared to travel; that is, his/her willingness to travel further. The empirical application is carried out in Spain in a context with 26 destinations, by applying Mixed Logit Models. The results evidence that the *variety-seeking behaviour* reduces the *dissuasive effect* of distance.

KEY WORDS: Tourism Marketing, Variety-seeking behaviour, Mixed Logit Model.

RESUMEN

El objetivo del presente estudio es contrastar el efecto del comportamiento "búsqueda de variedad" en la distancia que el turista está dispuesto a realizar; es decir, su predisposición a viajar más o menos lejos. La aplicación empírica se desarrolla en España en un contexto de 26 destinos, aplicándose un Modelo Logit Mixto. Los resultados evidencian que la "búsqueda de variedad" reduce el "efecto disuasivo" de la distancia.

PALABRAS CLAVE: Marketing Turístico, Búsqueda de variedad, Modelo Logit Mixto.

1. INTRODUCTION

The literature of destination choice is centred on the direct impact of destination attributes. However, sometimes the effect of such attributes could be moderated by other dimensions, which increase or diminish their positive or negative effect. In the realm of Tourism, the spatial configuration of tourist consumption makes the distance be a key attribute. Many studies have analysed the dimension "distance", but the results are not unambiguous. This fact is reasonably understood since one can readily think of a group of individuals for whom longer distances represent a deterrent factor whereas for another group travelling to faraway destination is an attraction factor (e.g. a tourist could be willing to visit an exotic destination although it implies travelling overseas).

In this context, this study analyses the moderating role of the *variety-seeking behaviour* in the influence of the attribute "distance" on the choice of tourist destinations. To do this, we propose the interaction of the distance with the *variety-seeking behaviour* of the tourist. The methodology applied is based on the estimation of Mixed Logit Models in order to control possible correlations between different destinations and tourist heterogeneity. The empirical application is carried out in Spain in a context with 26 destinations.

In order to fulfil this objective, the remainder of the paper is arranged as follows: The second section proposes and justifies the moderating role of the *variety-seeking behaviour* in the effect of distance on the choice of intra-country destinations. The third section covers the design of the investigation; describing the methodology, sample and variables used. The fourth section presents the results obtained and their discussion. Finally, the fifth section summarises the conclusions and implications for business management.

2. "DISTANCE" & "VARIETY-SEEKING" EFFECTS

Among the attributes of the destination analysed in literature, distance stands out because of their greater interest and importance (Wennergren & Nielsen, 1968; Stopher & Ergün, 1979; Moutinho & Trimble, 1981; Perdue, 1986; Borgers et al., 1989; Fesenmaier, 1988; Adamowicz et al., 1994; Schroeder & Louviere, 1999; Riera, 2000).

The distance between the usual place of residence of an individual and the destination is an especially important criterion due to the clearly inherent spatial dimension of tourist destination choice. However, there is no consensus among authors on its impact on destination choice; that is, there is no agreement on their dissuasive or attraction effect. One train of thought holds that distance -or geographical position of the tourist relative to destinations- is considered a restriction or a dissuasive dimension of destination choice, as the displacement of an individual to the destination entails physical, temporal and monetary cost (Taylor & Knudson, 1976). This is the result reached by the studies of Wennergren & Nielsen (1968), Perdue (1985), Borgers et al., (1988), Fesenmaier (1988), Adamowicz et al. (1994) and Schroeder & Louviere (1999).

Alternatively, another line of research proposes that distance can lend positive utility. Baxter (1979) shows that the journey itself, as a component of the tourism product, can give satisfaction in its own right so that, on occasions, longer distances are preferred. That is, an individual may choose a long-distance travel in automobile over a shorter travel in airplane to the same faraway destination, because of the opportunity to see sundry sights on the way to that destination[1].

Also, sometimes individuals might prefer to travel further because they are more likely to uncover new aspects. Elements such as the "Ulysses Factor" proposed by Anderson (1970) can influence the choice of faraway destinations[2]. In other words, visiting and discovering new places can moderate the effect of the distance between the place of origin and the destination (a tourist could be prepared to travel further if it entails visiting a new place). On this account, Mokhtarian & Salomon (2001) indicate that curiosity impels one to travel, so that an individual may wish to visit "an intriguing location on the other side of the planet"

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[1] Similarly, Wolfe (1970; 1972) indicates that distance does not always act as a dissuasive factor, as the friction derived from it disappears after passing a certain threshold and it becomes a favourable attribute of the utility of a destination. Beaman (1974; 1976) explains this behaviour through a marginal analysis of distance, by observing the reaction of individuals to each unit of distance and concluding that each additional unit travelled offers less resistance than the previous.

[2] The "Ulysses Factor" is a psychological aspect of special relevance in the planning of vacations, through which people feel a deep need to explore and to discover what lies beyond the known horizon (Anderson, 1970). In this line, Mayo & Jarvis (1981) suggest that this "need to explore" is determinant in the explanation of travel, due to the fact that "travel allows one to satisfy the intellectual need to know"

In this line, Mokhtarian & Salomon (2001) suggest that *variety-seeking*[3] is a factor that can influence on the distance, as it can increase the utility of more distant destinations and allows one to satisfy this trait. Moutinho & Trimble (1991) show, for the Grand Canyon case, that an individual has a greater willingness to travel long distances if s/he has not visited previously the destination; thus, the additional effort implied in the long distance will depend on whether is a first-time or a repeat visitor.

Taking the Mokhtarian and Salomon's suggestion and the Moutinho and Trimble's result as the key references, this study goes a step further, and proposes a moderating effect of the "variety-seeking behaviour" in a more general context with 26 destinations. Thus, it is attempted to give response to the following research question: *Does the "variety-seeking effect" influence on the willingness to travel further?* In other words, *is the impact of distance on the choice of destination moderated by the "variety-seeking effect"?*

3. RESEARCH DESIGN

3.1. Methodology

For the analysis of the *variety-seeking* effect on the distance travelled to the destination, we propose the estimation of Mixed Logit Models (MLM) due to: i) their ability to deal with the unobserved heterogeneity of tourists, by assuming that the coefficients of the variables vary among tourists; and ii) their flexibility, which allows representation of different correlation patterns among alternatives.

With regard to the first point, it is highly unlikely that the whole tourist sample has the same set of parameter values, which implies the need to consider unobserved heterogeneity of tourists in parameter estimations. Hence, the utility of alternative *i* for tourist *t* is defined as $U_{it} = X_{it}\beta_t + \varepsilon_{it}$ where X_{it} is a vector that represents the attribute distance and the variety-seeking behaviour of tourists; β_t is the vector of coefficients of distance and variety-seeking effect for each individual *t,* which represent personal

[3] Kemperman et al. (2000) analyse the concept "variety-seeking" in the tourism industry, and distinguish two types of diversifying behaviour: i) *derived*, in which a tourist changes the destination due to external motives (such as excess in demand or because that alternative is not available); and ii) *intentional*, in which the change of destination is the goal in itself.

tastes; and ε_{it} is a random term that is iid extreme value. This specification of the MLM allows coefficients β_t to vary over decision makers with density $f(\beta)$. As β_t is not observable, the probability is the integral of $P_t(i/\beta_t)$ over all the possible values of β_t:

$$P_i = \int_{\beta_t} \frac{\exp\left\{\sum_{h=1}^{H} x_{ih}\beta_{th}\right\}}{\sum_{j=1}^{J}\exp\left\{\sum_{h=1}^{H} x_{jh}\beta_{th}\right\}} \phi(\beta_t \mid b, W)d\beta_t$$

where J is the number of alternatives and ϕ is the density function of β_t, assuming that β_t is distributed as a Normal with average b and variance W[4].

With regard to the second aspect, the flexibility of the MLM allows one to avoid the assumption of Independence from Irrelevant Alternatives (IIA) of the Multinomial Logit Model. In fact, the MLM does not exhibit the restrictive substitution patterns of the Logit model, as the ratio of probabilities P_{ti}/P_{tj} depends on all the data, including the attributes of alternatives other than i and j.

With regard to the estimation of the MLM, the above integral does not give a closed solution, which means that its estimation requires the application of simulation techniques (Train, 2001). Thus, the final aim is to optimize the maximum simulated likelihood function. To realise the draws of the density function we use the Halton sequences method, which is found to be better than random draws as it reduces error (Spanier & Maize, 1991; Train, 1999; Munizaga & Alvarez-Daziano, 2001; Hensher, 2001).

In order to test whether the effect of distance on the utility derived from visiting a destination varies with respect to the fact that the destination has been previously visited, we estimate the interaction between "seeking-variety" and "distance" through the MLM. Moreover, the estimation of this model gives us two-level results: i) Direct measurement of the interaction "*variety-seeking* x *distance*"; and ii) Estimation of the proportion of sample individuals who show positive or negative preferences towards an attribute -parameters greater or lesser than zero, respectively-, through the normalization b/W~N(0,1), proposed by Train (1998); where, as indicated earlier, b and W are the

[4] In fact, a significant variance estimation implies the superiority of the Random coefficients Logit model over the Multinomial Logit model (Train, 2003).

mean and variance of the Normal distribution $\phi(\beta_{th}|b,W)$, being β_{th} the parameter for individual *t* that measures the effect of attribute *h*. For this particular application, this estimation allows us to know the percentage of individuals willing to travel long distances in order to reach a new destination (different from the one visited in last occasion) or the percentage of individuals willing to travel again long distances in order to reach a destination visited previously.

3.2. Sample, Data and Variables

To reach our proposed objectives, we have used information on tourist choice behaviour obtained from the national survey "Spanish Holidaying Behaviour (III)", which was carried out by the Spanish Centre for Sociological Research. This is due to the following reasons: i) The availability of information on individual tourist destination choice behaviour in terms of intra-country administrative units; and ii) The survey is directed at a sample (over 18 years old) obtained in origin (at home), which avoids the characteristic selection bias of destination collected samples, leading to a more precise analysis of tourist demand. The sample is taken by using multistage sampling, stratified by conglomerations, with proportional selection of primary units -cities- and of secondary units –censorial sections-. The information was collected through personal, at home, interviews with a structured questionnaire. This final sample consists of 160 individuals and represents a sample error of ±7.9% for a confidence level of 95.5%.

In order to make the choice model operative, we will define the variables used and identify the dependent and independent variables.

1) *Dependent variables.* To represent the intra-country destination (administrative units) chosen by the tourist, we use 26 dummy variables for the Spanish provinces[5] being chosen by the sample individuals.

2) Independent Variables.

a) *Distance to the destination*. For the purpose of this study, we use the distance in time invested in displacement. The use of this variable implies the construction of one origin-destination matrix of a 26x26

[5] In Spain there are 50 provinces, but 26 where the ones chosen by the individuals in the sample.

order, in which we include time expected between each origin and destination for the provinces. This information on displacement times between origins and destinations is found in the Campsa Interactive Guide (taking the provincial capitals as reference points) and in Iberia's web page.

b) *Variety-seeking behaviour (VSB):* Following Guadagni and Little (1983) and Gupta et al. (1997), in order to represent a non-repeat visit to a destination in two successive occasions, it is built up a dummy variable which takes value 1 if the chosen destinations in occasions *n* and *n-1* do not coincide; and zero otherwise. At the same time, it is created the opposite variable -*inertial behavior (IB)*- in order to observe the *repetition effect* on distance.

3.3. Results

The analysis of the moderating effect of the *variety-seeking behaviour* on the influence of distance on the choice of destinations implies the estimation, by simulated maximum likelihood, of a MLM (see Table 1). Equation 1 of the table shows the effect of distance with no interactive effects. We find that this dimension is significant at a level below 0.001 and presents a negative sign, which leads us to characterize distance as a dissuasive factor in the choice of destination, in line with Taylor and Knudson (1976). In other words, the displacement of an individual to the intra-country destination supposes physical, temporal and monetary investment. Apart from this, the significance of its variance at the 0.001 level suggests that distance has a differentiated effect among the individuals of the sample, and thus, longer distances do not suppose less utility for all the sample tourists[6]. This result evidences the possible existence of moderating effects.

In order to analyse the *variety-seeking behaviour* we estimate the Equation 2, where the interaction "*VSB* x *distance*" measures the impact of distance on the choice of destination which have not been visited previously. This interaction is significant at 0.001 level, implying that the *VSB* moderates the impact of distance. Moreover, the

[6] Especifically, according to the Normal distribution, 78.8% of the sample gets negative utility derived from increases in distance, whereas 21.18% obtaines satisfaction with long distances.

parameter obtained is smaller (in absolute terms) than the one in Equation 1 (χ_1^2=76.52; p<0.001). It means that the effect of distance is not as much negative when the destination has not been visited previously. In fact, distance generates positive utility for 30.23% (1-ϕ(-0.307/0.593)) of individuals showing a variety-seeking behaviour.

So as to refine the analysis, the effect of *repeat behaviour* on distance is also examined (Equation 3). In this case, the interaction "*RB* x *distance*" represents the impact of distance on destinations which have been previously visited. The interaction is significant at 0.001 level, implying that the *RB* moderates the impact of distance as well. However, in this case, we obtained a parameter which is greater (in absolute terms) than the one in Equation 1 (χ_1^2=37.26; p<0,001), meaning a loss of utility derived from visiting again faraway destinations and, thus, a reduction in the probability of this destination being chosen once again. As a matter of fact, only 9.38% (1-ϕ(-0.639/0.485)) of the sample would obtain a positive utility from visiting again a long-distance destination.

TABLE 1.
Moderating Effect of the *Variety-seeking behaviour* and *Repeat behaviour*
(Standard error in brackets)

Independent Variables	Equation 1		Equation 2		Equation 3	
	β	SD(β)	β	SD(β)	β	SD(β)
Distance	-0.456[a] (0.068)	0,570[a] (0,086)				
VSB x Distance			-0.307[a] (0.090)	0.593[a] (0.121)		
RB x Distance					-0.639[a] (0.104)	0.485[a] (0.132)
ϕ(β/V(β))	0.788		0.697		0.906	

a=prob<0,1%; b=prob<1%; c=prob<5%.

To sum up, although distance reduces the utility of destinations for the majority of individuals, its effect is moderated by the *variety-seeking* and *repeat behaviours*. In other words, tourists are willing to put greater (lesser) effort to vary (repeat) the visit to a faraway destination.

4. CONCLUSIONS

The idea that the effect of distance on the choice of tourist destinations could be moderated by the *variety-seeking behaviour* has allowed us to analyse this aspect in

Spain in a context with 26 destinations. The operative formalization to test this effect follows the Mixed Logit Model. This is due to their ability to deal with the unobserved heterogeneity of tourists, and because it is a flexible model that allows representation of different correlation patterns between different alternatives and, therefore, overcomes the inconveniences of non-compliance with the IIA hypothesis.

The empirical application realised on the analysed sample shows the following conclusions:

1) The dissuasive effect of distance is not common for all individuals. Longer distances mean greater resistance to travel to faraway destinations, but there is a percentage (11.8%) of people gaining positive utility derived from long distances.

2) The dissuasive influence of distance on the selection of destinations is moderated by the *variety-seeking behaviour*. In particular, the results obtained find that:

2.a) The *repeat behaviour* has a direct (increasing the dissuasive effect) moderating effect on the influence of distance. In other words, it reinforces the fact that individuals reduce their preference for distant destinations in which they have already stayed.

2.b) The *variety-seeking behaviour* has an inverse (reducing the dissuasive effect) moderating effect on the influence of distance. People seeking variety from one occasion to another are more willing to travel further and make longer journeys, as it allows them to satisfy their curiosity and their yearning to explore different places.

As implications for management, knowledge of the moderating role of *variety-seeking behaviour* in the effect of destination attributes (distance) on choice, enables tourism organizations to better design their Marketing strategies and policies, adapting them according to the key dimensions. In fact, the result obtained concerning distance, through which it is considered a dissuasive element in the choice of destination, implies that public and private managers should promote tourist destinations in the closest administrative units (provinces) as Spanish tourists are more likely to travel to closer destinations. However, the results reached regarding the moderating role of *variety-seeking behaviour* lead one to reorientate the former implication for distance. On the one hand, destinations looking for loyal clients should be promoted in neighbouring provinces, as repeat visitors are not willing to cover long distances.

On the other hand, for some destinations could be interesting to identify distant -or even "remote"- customers seeking variety, since they are prepared to travel further and, to some extent, to spend more money at destination due to longer stays. On this account, Silberman (1985) suggests that as distance increases length of stay will increase. This is due to the fact that travel costs are fixed and independent of the number of days spent at the destination, meaning that longer stays allow individuals to spread these fixed costs over a longer period. In other words, a tourist will be prepared to make a long journey if s/he stays at the destination for at least the minimum number of days which will compensate for the effort made in the journey and allows individuals to spread the fixed costs associated with the long journey over a period which is long enough. In this line, it is important to stress that the duration of stay is a relevant component of resort demand as it represents the "quantity of holiday" bought by the tourist (Mak & Moncur, 1979) and, thus, resort demand equals total visitors times length of stay (Silberman, 1985). In this line, Alegre & Pou (2003) point out that, assuming constant expenditures per person per day, the income received at a destination depends mainly on the number of tourists and the number of days they spend there, which allows public bodies to define strategies in order to increase aggregated expenditures: attracting a greater number of new tourists of such a level of per-day expenditures or promoting longer stays. Therefore, to develop this last strategy, a destination could design promotions for distant customers seeking variety as they are more likely to stay longer.

Among the limitations of this study are the following: i) the field of study is Spain. It would be useful if the results were reinforced by applications on other geographical areas in order to be able to generalise the conclusions; ii) the lack of available information on certain variables, such as psychological distance, and on an higher number of buying occasions that allows us to show more precise consumption patterns; and iii) we do not consider a specific destination, rather any of the destinations chosen by Spanish tourists. This could impede knowledge of the impact of the characteristic factors of a particular destination. However, this way of working allows us to find the influence of distance and *variety-seeking behaviour* in a general manner.

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